From: Mark Baker
To: Duke, Daphne

Cc: PSC Contact; Bateman, Andrew; Samuel Wellborn; Katie Brown; Hall, Roger; Grube-Lybarker, Carri

Subject: [External] DN 2022-155-E - Mark Baker, Complainant/Petitioner v. Duke Energy Progress, LLC,

Defendant/Respondent

Date: Monday, May 16, 2022 2:17:39 PM

Attachments: image.png image.png

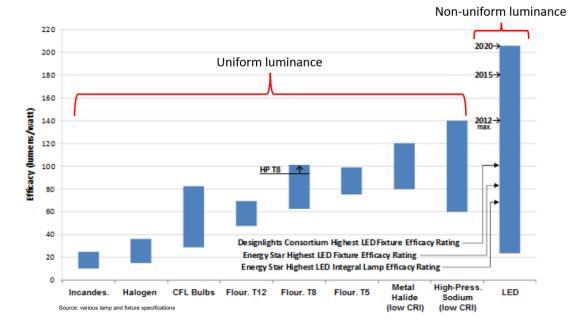
Dear SC PSC,

I am submitting this supporting evidence to assist Duke Energy Progress with their response to the question, "Does an LED streetlight emit the same or better quality light as an HPS streetlight?"

The photo below shows an LED streetlight on the left and HPS on the right.



The chart below shows the luminous efficacy of lamps that emit uniform luminance (including HPS) and LED lamps that emit non-uniform luminance.



Source: Centerpoint Energy - https://www.centerpointenergy.com/en-us/Documents/Commercial-Industrial-Docs/Lighting-Guide.pd:

The fact that LEDs emit non-uniform luminance is confirmed by the zebra pattern in the first photo. Given that LEDs emit non-uniform luminance versus the uniform luminance of HPS, it does not seem plausible that LEDs have the same quality of light as HPS.

Sincerely,

Mark Baker President Soft Lights Foundation www.softlights.org mbaker@softlights.org